

REMARKS

In accordance with 37 C.F.R. § 1.116(b), Applicants have amended claims 1 and 23 in response to requirements of form expressly stated in paragraph 2 on page 2 of the Final Office Action and earnestly request entry of said amendment. Claim 1 also has been amended to remove any latent ambiguity concerning the last phrase of claim 1.

Before entry of this Amendment, claims 1 - 30 were pending in the application. After entry of this Amendment claims 1 - 27 remain pending under examination. Claims 28 - 30 have been withdrawn. The number of total claims has not been increased, and the number of independent claims has not been increased beyond the number for which payment previously had been made.

Applicant has carefully considered the Examiner's Action of April 20, 2006, and the references cited therein. The following is a brief summary of the Action. Claim 1 was objected to because of informalities, which have been corrected in this Amendment along with similar informalities in claim 23. Claim 24 was objected to under 37 C.F.R. 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claim 2 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claims 1 - 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,045,900 (hereafter Haffner et al) in view of International Publication No. WO 01/83599 A1 (hereafter Morman et al).

Claim 1 expresses a range for the letdown resin density of between 0.900 and

0.915, which is a range that has a magnitude of 0.015 ($0.915 - 0.900 = 0.015$). Claim 2 further limits the range of the letdown resin density to less than 0.913 g/cc. A letdown resin density of less than 0.913 g/cc falls within the range of 0.900 and 0.915 of claim 1 and thus is not inconsistent with claim 1. Moreover, claim 2 reduces the magnitude of the range from claim 1's magnitude of 0.015 to claim 2's magnitude of 0.013 ($0.913 - 0.900 = 0.013$). Thus, claim 2 further limits claim 1 by reducing the claimed range from 0.015 to 0.013. Accordingly, it is respectfully submitted that claim 1 is not objectionable under 37 C.F.R. 1.75(c), and the objection to claim 2 is respectfully requested to be withdrawn.

Claim 1 requires the higher ethylene copolymer density in the carrier resin phase to be at least about 0.003 g/cc greater than the density of the letdown resin. Claim 1 further specifies that the letdown resin density is between 0.900 and 0.915. Thus, claim 1 requires the higher ethylene copolymer density to be between about 0.903 ($= 0.900 + 0.003$) and 0.918 ($= 0.915 + 0.003$). Claim 24 requires the higher density ethylene copolymer to have a density greater than 0.915 g/cc. Because claim 24 requires the higher density ethylene copolymer to be greater than 0.915 g/cc, then claim 24 necessarily limits the higher density of the ethylene copolymer to 0.916 through 0.918 g/cc, which is the maximum range allowed by claim 1. Thus, claim 24 precludes the high density ethylene copolymer between 0.903 and 0.915, which otherwise would be permitted pursuant to the range specified in claim 1. Accordingly, claim 24 properly further limits the subject matter of claim 1 by eliminating portions of the range that otherwise would be permitted pursuant to claim 1. It therefore is respectfully submitted that claim 24 is not objectionable under 37 C.F.R. 1.75(c), and the objection of same is

respectfully requested to be withdrawn.

The provisional rejections of claims 1 - 27 over claims 1 - 50 of co-pending Application No. 10/703,761 and claims 1 - 51 of co-pending Application No. 10/335,244 for obviousness-type double patenting are noted and will be addressed at such time as either of the applications becomes a patent with claims that would support such rejections.

Claims 1 - 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Haffner et al in view of Morman et al. Applicant respectfully traverses the rejection of the claims for the reasons explained below.

Claim 1, as presented herein, calls for a breathable laminate formed from a nonwoven support layer bonded to an oriented film. The oriented film includes a letdown resin phase having an ethylene copolymer with a density between 0.900 and 0.915 and melt index of no greater than 6 g/ 10 minutes. The oriented film also includes a carrier resin phase comprising a filler in a different ethylene polymer or copolymer having a density at least about 0.003 g/cc greater than the density of the letdown resin. Substantially all of the filler particles in the oriented film are contained within discreet regions of the carrier resin phase, as depicted for example in the cross-sectional illustration of FIG. 1.

Paragraph 1 on page 2 of the Final Office Action concedes that Haffner et al:

fails to teach an ethylene copolymer having a density between 0.900 and 0.915 and a melt index of 6 and a different ethylene polymer or copolymer having a density of at least 0.003 g/cm³ greater than that of the letdown resin.

Subparagraph a of paragraph 1 on page 3 of the Final Office Action takes the following position about Haffner et al's disclosure:

Example 1 teaches the use of calcium carbonate (filler), LLDPE [carrier resin] (density of 0.918 g/cm³ and a melt index of 3.5 g/ 10 min) and LDPE [letdown resin] (density of 0.916 g/cm³ and a melt index of 12 g/ 10 min). * * * The applied reference is silent as to the use of an ethylene polymer or copolymer having a density of at least 0.003 g/cm³ greater than that of the letdown resin.

Morman et al fails to overcome this deficiency in Haffner et al, and indeed the Final Action does not contend that Morman et al supplies this deficiency in Haffner et al.

Subparagraph b of paragraph 1 on page 4 of the Final Office Action provides the following reason for concluding that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used ethylene polymer or copolymer having a density of at least 0.003 g/cm³ greater than that of the letdown resin in the article of Haffner et al:

it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

However, this conclusion is defeated by the particular facts of the present application. The primary inventor of the subject invention is Ann Louise McCormack, and the present application was filed on August 22, 2003. Ann Louise McCormack also was Mr. Haffner's co-inventor of Haffner et al, which was filed on September 15, 1997, almost six years before the subject application was filed. Thus, Ann Louise McCormack, arguably a person of extraordinary skill in this art by virtue of her co-inventorship of Haffner et al, required almost another six years and the assistance of two additional co-inventors to arrive at the present invention with its insight of using an ethylene polymer or copolymer having a density of at least 0.003 g/cm³ greater than that of the letdown resin in the article of Haffner et al. Accordingly, the Final Office

Action's purely theoretical assertion of obviousness must give way to this case's particular facts, which demonstrate non-obviousness to even a person (Ann Louise McCormack) of more than ordinary skill in this art at the time this invention was made.

As explained throughout Applicants' specification, the film formulations for the letdown and carrier resins result in better film properties, particularly when used as breathable films in absorbent article constructions. The improved film formulation results in a film/nonwoven laminate with increased cross machine direction (CD) extensibility and integrity. As explained at page 7 of the specification, important to the design of the film/nonwoven laminate is the selection of a letdown resin having the density and melt index parameters as set forth in claim 1. Because Applicants have demonstrated advantages from the particular formulations being claimed, the burden shifts to the Office to demonstrate that the prior art recognized that these advantages could be obtained from these particular formulations. In re Newell, 891 F.2d 899, 13 USPQ2d 1248, 1250 (Fed. Cir. 1989) ("[A] retrospective view of inherency is not a substitute for some teaching or suggestion which supports the selection and use of the various elements in the particular claimed combination.").

Moreover, claim 1 imposes the additional requirement : "wherein substantially all of said filler in said oriented film is contained only within discreet regions of said carrier resin phase and thereby separated from contact with said letdown phase." FIG. 1 of the present specification illustrates this feature, wherein 15 designates the letdown resin and 13 designates a carrier resin wherein substantially all of the filler particles 17 within the film 12 are contained only within the discreet regions 13 of the carrier resin phase and thereby separated from contact with the letdown phase 15.

Subparagraph a of paragraph 1 on page 3 of the Final Office Action takes the following position about Haffner et al's disclosure of the disposition of the filler:

Examiner takes the position that the filler is necessarily contained within the carrier resin phase as the filler is mixed with the carrier resin and then formed into a layer.

However, Haffner et al's disclosure of the disposition of the filler fails to mention or suggest that substantially all of the filler particles are kept separated from contact with the letdown phase by being contained only within the carrier phase. Nor does Haffner et al's disclosure explain the unique way that this unique disposition of the filler particles is brought about.

At page 7, line 28 through page 8, line 3, the present specification discloses how this result with the filler particles is brought about (emphasis added):

The formulation is obtained by mixing the filler with the carrier resin forming concentrate pellets, for example, and then combining the carrier resin pellets by, for example, dry blending with pellets of the letdown resin in an amount selected to produce the desired final filler concentration and resulting film breathability. Desirably the concentrate filler resin will have the filler in the range of from about 65% by weight to about 85% by weight, more desirably from about 70% by weight to about 80% by weight for breathability in the ranges above described. In accordance with the invention, **the carrier resin and the letdown LLDPE are processed with limited mixing** such as provided by a conventional linear polyethylene barrier single screw mixer available from multiple vendors such as Davis Standard, for example, **with the result that the film produced includes at least two phases, a carrier resin phase that is rich in filler and a letdown resin phase that contains little or no filler.**

Haffner et al fails to disclose or suggest any such processing of the film. It is therefore respectfully submitted that Haffner et al does not necessarily disclose a film as in Applicants' FIG. 1 having discreet regions of a letdown resin 15 and a carrier resin 13 wherein substantially all of the filler particles 17 within the film are contained only within the discreet carrier resin 13 regions with the result that substantially all of the filler

particles 17 are thereby separated from contact with the letdown phase 15. In applicants' oriented film of claim 1, the filler particles 17 reside in pores 19 that form when the film 12 is stretched or oriented. As explained at page 7, line 28 through page 8, line 3, of the present application, the unique film formulation is obtained by mixing the filler 17 with the carrier resin 13 as to form concentrate pellets, and then combining the carrier resin pellets with pellets of the letdown resin **in a process with limited mixing such that the resultant film includes the discreet regions or phases of the letdown resin and carrier resin.** In fact, the examples set forth in Haffner et al indicate that the filler particles are obtained from a source different than the polymers and are coextruded with the different polymers. Indeed, rather than limited mixing, Haffner et al employs co-extrusion to form the film's precursor as explained at Haffner et al column 11, lines 51 – 53 (emphasis added):

Referring to FIG. 3, the multilayer film 11 is formed from a **co-extrusion film apparatus** 100 such as a cast or blown unit as was previously described above.

Nor do FIGS. 1 and 2 of Haffner et al indicate the type of filler isolation structure of Applicants' claim 1.

Moreover, as can be seen from Morman et al FIG. 2's uniform distribution of filler particles 116 throughout the Morman et al matrix 111, Morman et al teaches away from this isolation of the filler particles in the carrier phase of the film that is required by Applicants' claim 1 and absent in the Haffner et al disclosure.

Accordingly, Applicants respectfully submit that the Morman et al publication does not change Haffner et al's deficiencies discussed above and does not render claim 1 obvious even if combined with Haffner et al. There is no teaching, suggestion,

or motivation to reconfigure the polymer formulations set forth in Haffner et al in view of any teaching in the Morman et al publication.

Accordingly, it is respectfully submitted that claim 1 is allowable over the art of record. Claims 2-27 only further patentably define the invention of claim 1 and are thus allowable for at least the reasons claim 1 is allowable. Applicants therefore respectfully submit that claims 1-27, as presented herein, are patentable under 35 U.S.C. 103(a) over Haffner et al in view of Morman et al.

Applicants respectfully request reconsideration and reexamination of claims 1 - 27, as presented herein, and submit that these claims are in condition for allowance and should be passed to issue.

If any fee or extension of time is required to obtain entry of this Amendment, the undersigned hereby petitions the Commissioner to grant any necessary time extension and authorizes charging Deposit Account No. 04-1403 for any such fee not submitted herewith. The Examiner is encouraged to contact the undersigned at his convenience should he have any questions regarding this matter or require any additional information.

Respectfully submitted,

DORITY & MANNING, P.A.

DATE: 07/20/06

BY: Stephen E. Bondura

Stephen E. Bondura
Reg. No. 35,070
P.O. Box 1449
Greenville, SC 29602-1449
(864) 271-1592
Fax: (864) 233-7342